AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.   Method for the production of an isotropic polymeric network comprising multifunctional molecules with a functionality of at least 5 by reacting in a solvent the multifunctional molecules with a coupling agent, wherein the coupling agent is present in an amount which is sufficient to couple the multifunctional molecules to at least 5 other multifunctional molecules and wherein the sum, ρ, of the amounts of the multifunctional molecules and coupling agent per unit of volume, in kg/m^3, is at least equal to the value as given by expression (I)

$$\frac{a(m_1 + \frac{n}{2}m_2)}{10^{26}(d+L)^3} \qquad \text{(I)}$$

in which

a = 0.2

d = the diameter of the multifunctional molecule, including the length of the bonds to the middle of atoms of the coupling agent to which it is attached

L the length of the coupling agent, measured between the middle of the atoms that are connected to the multifunctional molecule

m_1 = the molecular mass of the multifunctional molecule as present in the isotropic polymeric network

m_2 = the molecular mass of the coupling agent as present in the isotropic polymeric network

n = the functionality of the multifunctional molecule (n $\geq$ 5)

2. (original)   Method for the production of a isotropic polymeric network according to claim 1, wherein ρ is at least equal to the value as given by expression (I), wherein a=0.4.

3. (currently amended)   Method for the production of an isotropic polymeric network according to ~~any one of claims 1-2~~ claim 1, wherein the coupling agent comprises a rod like molecule.

4. (original)   Isotropic polymeric network with a density lower than 1000 kg/m^3 and a specific Young's modulus of at least 0.01 GPa.m^3/kg.

5. (original) Isotropic polymeric network according to claim 4, wherein the network is substantially free of cavities comprising a gas.

6. (currently amended)   Shaped article comprising the isotropic polymeric network according to ~~any one of claims 4-5~~ claim 4.

7. (currently amended)   Use of the isotropic polymeric network of ~~any one of claims 4-5~~ claim 4 as a construction material.